



# M32

DirectDigital DAC Amplifier

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ENGLISH



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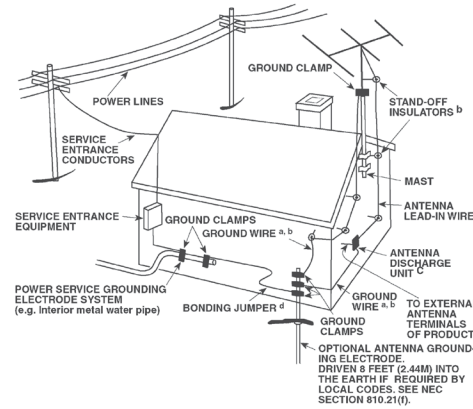
Owner's Manual

# IMPORTANT SAFETY INSTRUCTIONS

1. **Read instructions** - All the safety and operating instructions should be read before the product is operated.
2. **Retain instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. **Water and Moisture** - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
8. **Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9.  **Cart** - A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
10. **Ventilation** - Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **Power Sources** - This product should be operated only from the type of power source indicated on the marking label and connected to a MAINS socket outlet with a protective earthing connection. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
12. **Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
13. **Mains Plug** - Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
14. **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

## NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



15. **Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
16. **Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. **Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
18. **Flame Sources** - No naked flame sources, such as lighted candles, should be placed on the product.
19. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
20. **Headphones** - Excessive sound pressure from earphones and headphones can cause hearing loss.
21. **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power-supply cord or plug is damaged.
  - b. If liquid has been spilled, or objects have fallen into the product.
  - c. If the product has been exposed to rain or water.
  - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  - e. If the product has been dropped or damaged in any way.
  - f. When the product exhibits a distinct change in performance-this indicates a need for service.
22. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

**23. Battery Disposal** - When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

**24. Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**25. Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

**WARNING**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



THE EQUIPMENT MUST BE CONNECTED TO AN EARTHED MAINS SOCKET-OUTLET.

**CAUTION REGARDING PLACEMENT**

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) than is equal to, or greater than shown below.

- Left and Right Panels: 10 cm
- Rear Panel: 10 cm
- Top Panel: 10 cm

**FCC STATEMENT**

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

**CAUTION**

Changes or modifications to this equipment not expressly approved by NAD Electronics for compliance could void the user's authority to operate this equipment.

**CAUTION**

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

**CAUTION**

Marking and rating plate can be found at the rear panel of the apparatus.

**WARNING**

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.

Mains plug is used as disconnect device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected from the mains socket outlet completely.

Battery shall not be exposed to excessive heat such as sunshine, fire or the like.

**CAUTION**

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection.

**IF IN DOUBT CONSULT A COMPETENT ELECTRICIAN.**



This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 2004/108/EC.



**NOTES ON ENVIRONMENTAL PROTECTION**

At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging point this out.

The materials can be reused in accordance with their markings. Through re-use, recycling of raw materials, or other forms of recycling of old products, you are making an important contribution to the protection of our environment.

Your local administrative office can advise you of the responsible waste disposal point.

**RECORD YOUR MODEL NUMBER (NOW, WHILE YOU CAN SEE IT)**

The model and serial number of your new M32 are located on the back of the cabinet. For your future convenience, we suggest that you record these numbers here:

Model number : .....  
 Serial number : .....

# INTRODUCTION

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### THANK YOU FOR CHOOSING NAD.

The M32 DirectDigital DAC Amplifier is an elegant, top-of-the-line, BluOS™ capable integrated amplifier with a host of features that offer maximum flexibility, excellent efficiency, and reduced noise and distortion. Its advanced software-controlled algorithms result in the shortest signal path from source to speaker producing virtually no distortion and a damping factor of over 1,000. This technology is among the fastest and most accurate amplification and error correction available.

Using a proprietary modular design, you can upgrade or expand your M32 as technologies emerge, ensuring a cost-effective way to keep the music "on" into the future.

As with all our products, NAD's "Music First" design philosophy guided the M32's design. We have also been careful to ensure that the M32 is as musically transparent, faithful to every detail and spatially accurate as possible, incorporating much of what we've learned from more than a quarter-century's experience designing audio, video and home-theater components.

We encourage you to take a few minutes now to read right through this manual. Investing a little time here at the outset might save you a good deal of time later, and is by far the best way to ensure that you make the most of your investment in the M32.

For warranty information contact your local distributor.

**NAD SHALL NOT BE HELD LIABLE FOR ANY TECHNICAL OR USER INTERFACE DISCREPANCIES IN THIS MANUAL. THE M32 OWNER'S MANUAL MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. CHECK OUT THE NAD WEBSITE FOR THE LATEST VERSION OF THE M32 OWNER'S MANUAL.**

### WHAT'S IN THE BOX

Packed with your M32 you will find

- Two detachable mains power cord
- The HTRM 2 remote control with 4 AA batteries
- Four magnetic feet
- Cleaning cloth
- USB flash drive
- Quick Setup Guide

### SAVE THE PACKAGING

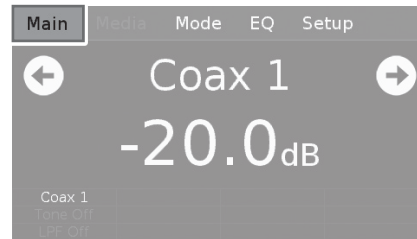
Please save the box and the packaging that came with the M32. Should you move or need to transport your M32, this is the safest container to use. We've seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton, so please: Save that box!

### CHOOSING A LOCATION

Choose a location that is well ventilated (with at least several inches to both sides and behind), and will provide a clear line of sight, within 25 feet / 8 meters, between the M32's front panel and your primary listening/viewing position - this will ensure reliable infrared remote control communications. The M32 generates a modest amount of heat, but nothing that should trouble adjacent components.

### RESTORING M32 TO ITS FACTORY DEFAULT SETTINGS

- 1 Press and hold front panel's "Main" display.



- 2 Select "Factory Reset" display option.



- 3 Select "Yes" to reset your M32 to factory default settings or "No" if you decide not to reset your M32.



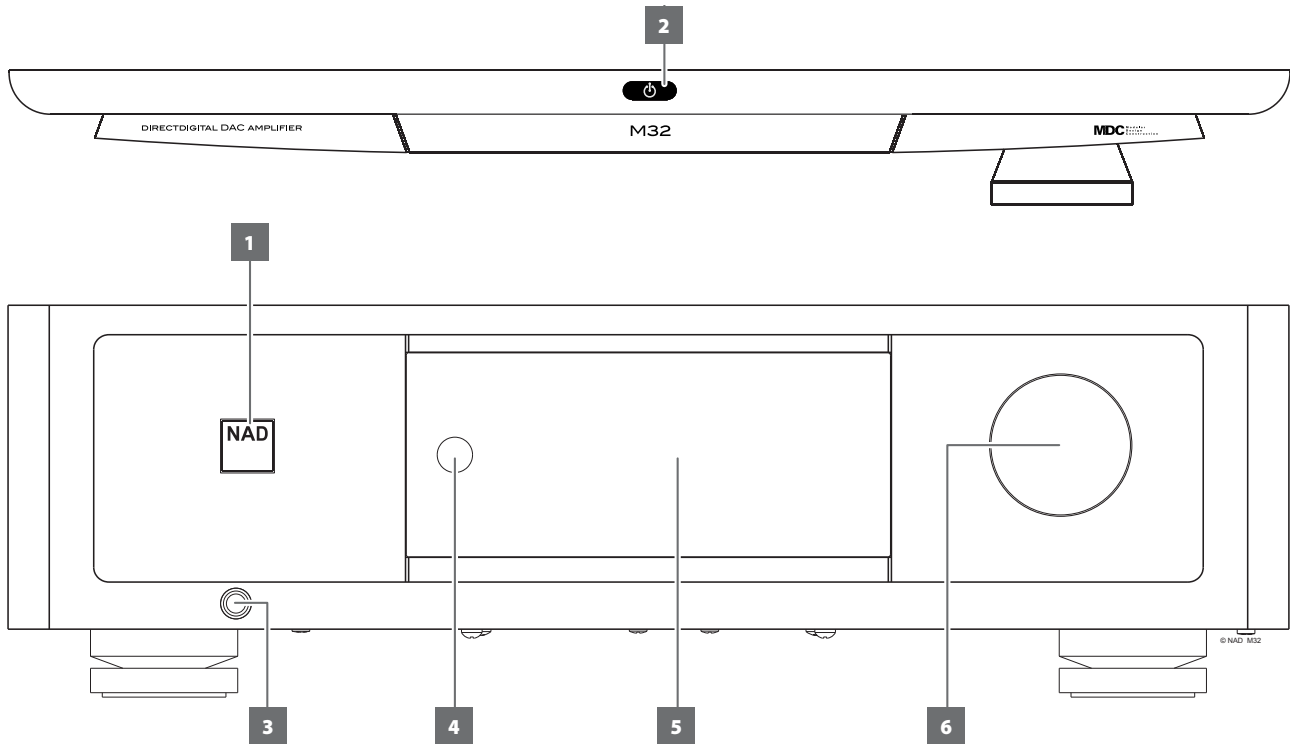
- 4 Factory reset is complete when the M32 goes to standby mode.

### IMPORTANT NOTE

*After factory reset, wait out for at least one minute to switch back the M32 from standby mode to operating mode. This wait time can be bypassed by turning OFF/ON the rear panel power switch and then press Standby button.*

# IDENTIFICATION OF CONTROLS

## FRONT PANEL



### 1 POWER INDICATOR

- This indicator will be amber when the M32 is in standby mode.
- When the M32 is powered up from standby mode, this indicator will change from amber to bright white color.

### 2 ⏻ (STANDBY)

- Touch the ⏻ (Standby) button on top of the unit to switch the M32 ON from standby mode. The Power indicator will change from amber to bright/white color.
- Press and hold ⏻ (Standby) button until M32 switches back to standby mode.
- One press or touch of the ⏻ (Standby) button will not switch the M32 to standby mode. This is intended to avoid unintentionally setting the M32 to standby mode if one happens to just touch or press the ⏻ (Standby) button at operating mode.
- The Power indicator will change to amber color at standby mode.
- The ⏻ (Standby) button cannot activate the M32 if the rear panel POWER switch is off.
- Refer also to +12V TRIGGER - REAR PANEL.

### 4 REMOTE SENSOR

- Point the HTRM 2 remote control at the remote sensor and press the appropriate buttons.
- Do not expose the remote sensor of the M32 to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the M32 with the remote control.  
**Distance:** About 23 ft. (7 m.) from the front of the remote sensor.  
**Angle:** About 30 degrees in each direction of the front of the remote sensor.

### 5 DISPLAY (TOUCH PANEL DISPLAY)

- Displays visual and menu information according to the settings selected.
- The following display options are accessible via the touch panel display - Main, Media, Mode, EQ and Setup.
- Touch the screen to select any of the display options, to see their corresponding menu options, or settings.

### 6 VOLUME

- The VOLUME control adjusts the overall loudness of the signal sent to the loudspeakers. The Volume control is characterized by perfect signal tracking and channel balance. It provides a highly linear and low noise operation.
- Turn clockwise to increase the volume level and counter clockwise to lower it.
- The default volume level is -20dB.

### IMPORTANT NOTES

*For the ⏻ (Standby) button to activate, the following must occur:*

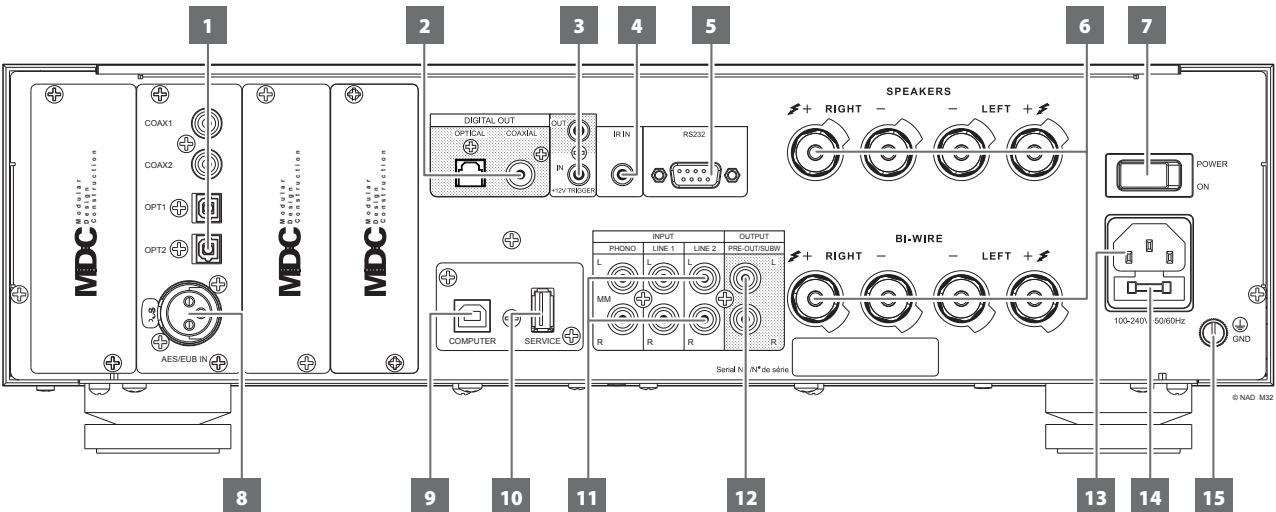
- The supplied power cord from the M32 must be plugged in to a power source.*
- The rear panel POWER switch must be set to ON.*

### 3 HEADPHONE

- A 1/4" stereo jack socket is supplied for headphone listening and will work with conventional headphones of any impedance.
- The volume, tone and balance controls are operative for headphone listening. Use a suitable adapter to connect headphones with other types of sockets, such as 3.5mm "personal stereo" jack plugs.

# IDENTIFICATION OF CONTROLS

## REAR PANEL



### ATTENTION!

Please ensure that the M32 is powered off or unplugged from the main power source before making any connections. It is also advisable to power down or unplug all associated components while making or breaking any signal or AC power connections.

#### 1 COAX 1-2, OPT 1-2

- Connect to the corresponding optical or coaxial digital output of sources such as CD or BD/DVD players, digital cable box, digital tuners and other applicable components.

#### 2 COAXIAL OUT, OPTICAL OUT,

- Connect the optical or coaxial DIGITAL OUT to a corresponding digital audio input of compatible devices such as receivers, computer soundcards or other digital processors.

### NOTE

Only digital sources can be streamed through COAXIAL/OPTICAL DIGITAL OUT.

#### 3 +12V TRIGGER +12V TRIGGER OUT

The +12V TRIGGER OUT is used for controlling external equipment equipped with a +12V trigger input.

- Connect this +12V TRIGGER OUT to the other equipment's corresponding +12V DC input jack using a mono cable with 3.5mm male plug.
- This output will be 12V when the M32 is ON and 0V when it is either OFF or in standby mode.

#### +12V TRIGGER IN

With this input triggered by a 12V DC supply, the M32 can be switched ON remotely from Standby Mode by compatible devices such as amplifiers, preamplifiers, receivers, etc. If the 12V DC supply is cut off, the M32 will return to standby mode.

- Connect this +12V Trigger input to the remote device's corresponding +12V DC output jack using a mono cable with 3.5mm male plug. The controlling device must be equipped with a +12V trigger output to use this feature.

#### 4 IR IN

- This input is connected to the output of an IR (infrared) repeater (Xantech or similar) or the IR output of another component to allow control of the M32 from a remote location.

#### 5 RS 232

NAD is a certified partner of AMX and Crestron and fully supports these external devices. Check out the NAD website for information about AMX and Crestron compatibility with NAD. See your NAD audio specialist for more information.

- Connect this interface using RS-232 serial cable (not supplied) to any Windows compatible PC to allow remote control of the M32 via compatible external controllers.
- Refer to the NAD website for information about RS232 Protocol documents and PC interface program.

#### 6 SPEAKERS

- The M32 has two sets of SPEAKER connections which are identical in function (parallel connection). They allow for bi-wiring.
- Connect M32's Right speaker terminals marked "R +" and "R -" to the corresponding "+" and "-" terminals of your designated right speaker. Repeat the same for M32's Left speaker terminals and corresponding left speaker.
- Double check the speaker connections before powering up the M32.

#### BI-WIRING

Most high quality loudspeakers offer the option of Bi-wiring. This separates the High Frequency (HF) crossover from the Low Frequency (LF) crossover. This offers enhanced performance by preventing LF returned currents from affecting the HF performance. To bi-wire, remove the "links" at the loudspeaker that connect the LF and HF sections (these are provided for convenience when a single wire connection is used).

### NOTES

- Use 16 gauge (American Wire Gauge or AWG) or lower stranded wire. Connections to the M32 can be made with banana-type plugs.
- Bare wire or pins can also be used by loosening the terminal's plastic nut, making a clean, neat connection and re-tightening. To minimize the danger of a short circuit, ensure that only 1/2-inch of exposed wire or pin is used to connect and no loose strands of speaker wire.

# IDENTIFICATION OF CONTROLS

## REAR PANEL

### 7 POWER

- The POWER switch supplies the master AC mains power for the M32.
- When the POWER switch is set to ON position, the M32 goes to standby mode as shown by the amber status condition of the front panel Power indicator. Press the front panel Standby button or HTRM 2's remote control's [ON] button to switch ON the M32 from standby mode.
- If you do not intend to use the M32 for long periods of time (such as when on vacation), switch off the POWER switch.
- With POWER switched off, neither the front panel Standby button nor HTRM 2 remote control's [ON] button can activate the M32.

### 8 DIGITAL AES/EBU

- Connect SACD/CD Players or processors to this XLR connector for digital audio streaming.
- High-end sources with higher sampling rates (176kHz and 192kHz) should be connected to the AES/EBU IN connector.

### 9 COMPUTER

- Use a Type A to Type B cable connector (not supplied), to interface computer audio to this asynchronous Type B USB input to directly stream 24/192 PCM content from your PC or MAC.
- The Type A-style connector is a flat, rectangular interface.
- The Type B-style interface is square in shape and has beveled corners on the top ends of the connector.
- Refer to LISTENING TO COMPUTER in the OTHER FEATURES section on the OPERATION page.

### 10 SERVICE

Use for servicing purposes only. Not for consumer use.

### 11 INPUT

**PHONO:** Input for a Moving Magnet (MM) phono cartridge. Connect the twin RCA lead from your turntable to this input if you are using a Moving Magnet cartridge.

**LINE1, LINE 2:** Input for line level sources such as CD player, tuner or any compatible devices. Use a twin RCA-to-RCA lead to connect the source device's left and right "Audio Output" to this input.

### 12 OUTPUT (PRE-OUT/SUBW)

- These output terminals have dual function. They are used either as PRE-OUT or SUBWOOFER terminals.
- The M32 and associated external devices must be turned OFF always before connecting or disconnecting anything to the OUTPUT sockets.

### IMPORTANT

Set the "Sub Output" option under "Speaker Setup" settings to "ON" for the OUTPUT terminals to function as Subwoofer out. On the other hand, the OUTPUT terminals will function as PRE-OUT if the "Sub Output" option is set to "OFF".

### PRE-OUT

- The PRE OUT/SUBW sockets make it possible for the M32 to be used as a full range preamplifier to an external power amplifier.
- Use a dual RCA cable to connect PRE-OUT/SUBW to the corresponding analog audio input of compatible devices such as amplifiers, receivers or other applicable devices.
- PRE-OUT/SUBW will be affected by the M32's volume control settings. Turn the VOLUME control to adjust the output level of the PRE OUT/SUBW sockets.

### SUBWOOFER

- Use a dual RCA cable to connect PRE OUT/SUBW to the low level input of a powered subwoofer.
- Low frequency information up to 200Hz is sent to the connected subwoofer via PRE OUT/SUBW.

### 13 AC MAINS INPUT

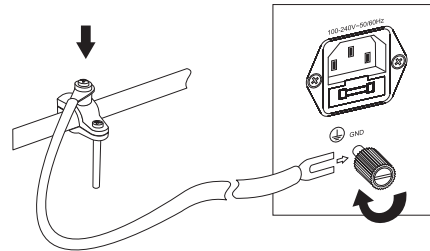
- The M32 comes supplied with two separate mains power cords. Select the mains power cord appropriate for your region.
- Before connecting the plug to the mains power source, ensure that it is firmly connected to the M32's AC Mains input socket.
- Always disconnect the mains power plug from the mains power source before disconnecting the cable from the M32's AC Mains input socket.

### 14 FUSE HOLDER

- Only qualified NAD service technicians can have access to this fuse holder. Opening this fuse holder may cause damage thus voiding the warranty of your M32.

### 15 GROUND TERMINAL

- Ensure that the M32 is plugged-in to a grounded AC wall outlet.
- If necessary, use this ground terminal to connect to ground a phono or turntable source for PHONO input.
- If a separate earth ground is necessary, use this terminal to ground your M32. The M32 can be connected to ground by connecting a ground lead wire or similar to this terminal. After insertion, tighten the terminal to secure the lead.



### NOTES

- The above illustration shows the M32 being connected to ground via a metal water pipe. There may be other grounding conductor points in your home. Consult with a licensed electrician to locate or install a grounding conductor in your home. NAD is not responsible for any malfunction, damage or costs associated with the installation, connection, or grounding of your M32.
- The grounding wire is not supplied with your M32.



# IDENTIFICATION OF CONTROLS

## REAR PANEL

### MDC CLASSIC UPGRADE SLOTS

The delivery format of digital content is constantly changing in pure digital systems like the M32. Each of these formats typically requires specialized hardware and software, often with licensed IP and content copy protection.

To address continuous technological evolution, NAD has placed all digital interface circuitry of the M32 on easily upgradable modules, called Modular Design Construction (MDC). The M32 includes one MDC module – the DD SPDIF which has digital coaxial, optical and AES/EBU input terminals.

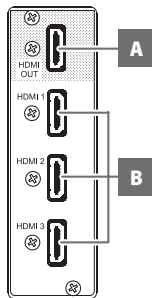
There are three optional MDC modules – the DD HDM-1, the DD AP 1 and the MDC BluOS modules. Remove covers to install the optional Modular Design Construction (MDC) modules.

Consult with your NAD dealer on how to procure the DD HDM-1, the DD AP 1 and MDC BluOS modules and their installations to the M32.

### DD HDM-1 (DIRECT DIGITAL HDMI)

The DD HDM-1 offers three HDMI input terminals and one HDMI output with video pass through. With DD HDM-1 installed, the M32 can be the heart of a "Video 2.0" system using the mandatory 2 channel linear PCM soundtrack from Blu-ray or DVD to make a compelling high definition theater presentation. DD HDM-1 is fully 3D video compatible without surround sound decoding or video processing.

- A HDMI OUT:** Connect the HDMI Monitor OUT to a HDTV or projector with HDMI input.
- B HDMI 1 -3:** Connect to the HDMI OUT connectors of source components such as DVD player, BD player or HDTV satellite/cable box.



#### WARNING!

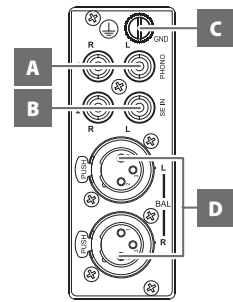
*Before connecting and disconnecting any HDMI cables, both the M32 and the source must be powered OFF and unplugged from the AC outlet. Failure to do so may cause permanent damage to equipment connected via HDMI sockets.*

### DD AP 1 (DIRECT DIGITAL ANALOG-PHONO)

DD AP 1 uses high quality Analog-to-Digital conversion to make analog sources compatible with M32's pure digital circuitry. The PHONO circuit has impedance settings for Moving Magnet (MM) and Moving Coil (MC) with gain automatically set.

The DD AP 1 consists of the following line level input terminals – PHONO, SINGLE-ENDED (ANALOG) and BALANCED.

- A PHONO:** Input for either a MM or MC phono cartridge. Connect the twin RCA lead from your turntable to this input.
- B SE IN (SINGLE-ENDED):** Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of a CD player, preamplifier or processor.
- C PHONO GROUND CONNECTOR:** Turntables normally include a single wire earth lead. Use the M32 phono ground connector to connect this lead. Unscrew the terminal and insert the ground wire into the hole. Tighten the terminal to secure the lead.
- D BALANCED:** Connect XLR audio sources to these connectors. Ensure that proper pin configurations are followed – Pin 1: Ground, Pin 2: Positive (signal live) and Pin 3: Negative (signal return).



### MDC BluOS

BluOS is a music management software developed by NAD's sister brand, Bluesound. Integrating MDC BluOS will add BluOS network and internet music streaming with advanced music management to your M32. Refer to "[MDC DD BluOS Mounting Instructions](#)" and "[Configuring DD BluOS](#)" for instructions on how to install and integrate the MDC BluOS with the M32.

#### IMPORTANT NOTE

*BluOS audio cannot be streamed through digital output terminals.*

### BluOS PLAYBACK CONTROLS

Using the HTRM-2 remote control, the following control buttons are applicable for BluOS playback. Set DEVICE SELECTOR to MP for BluOS playback control.


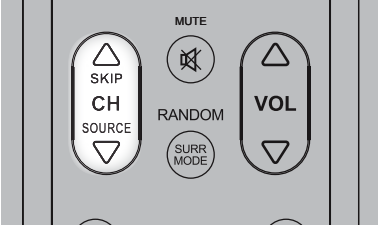
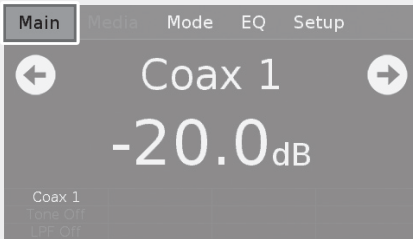
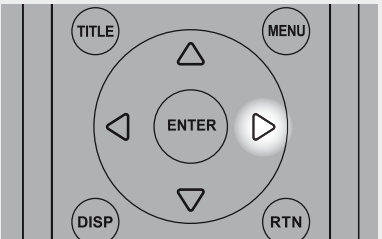
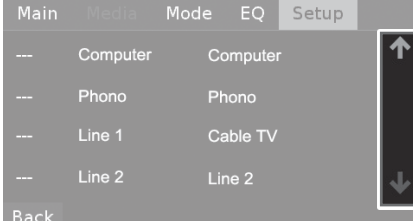
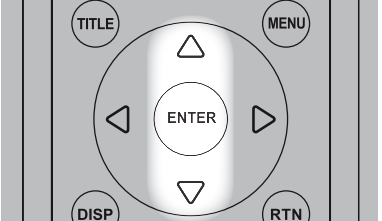
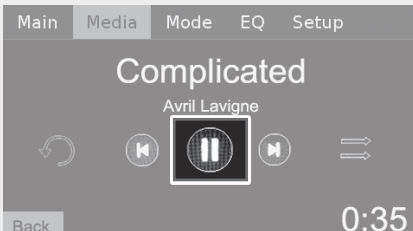

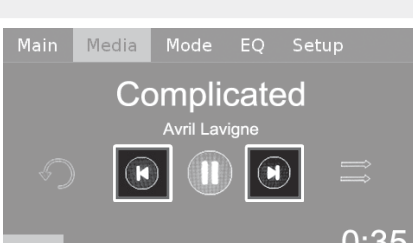

- ▶ : Resume playback from pause mode.
- ⏸ : Pause current playback.
- ⏮ : Skip back to the beginning of current song.
- ⏭ : Skip forward to the next song.
- REPEAT** : Repeat song, playlist, all or repeat off.
- RANDOM** : Play songs/playlist in random order.

# OPERATION

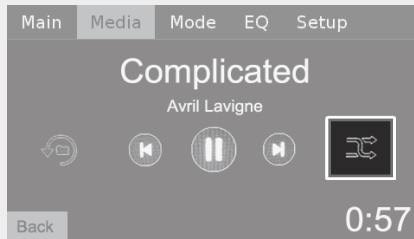
## USING THE M32

### NAVIGATING THE M32 FEATURES AND MAKING CHANGES

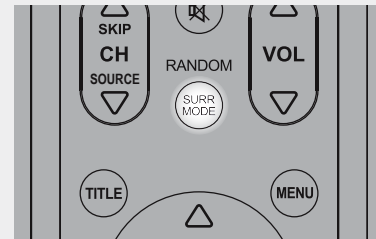
Use the HTRM 2 or applicable touch panel display items to select Sources, navigate through the M32 features and access to other functions. The following are some of the key functions.

FEATURE/FUNCTION/ITEM	TOUCH PANEL DISPLAY	HTRM 2
Selecting Sources.		
Access menu options.		
Scroll through the list.		
Playback/pause song.		 <p>DEVICE SELECTOR must be set to MP.</p>
Skip to next song. Skip back to previous song.		 <p>DEVICE SELECTOR must be set to MP.</p>

Random playback.

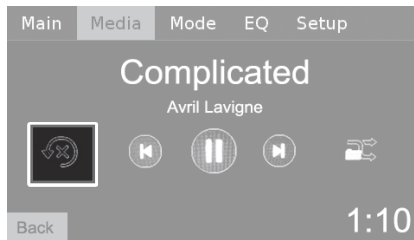


Press repeatedly to toggle random playback of current list, all folders or random off.



RANDOM. DEVICE SELECTOR must be set to MP.

Repeat playback.

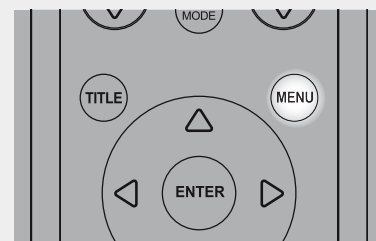
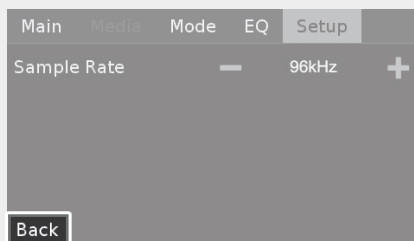


Press repeatedly to toggle repeat playback - current file, all folders or repeat off.



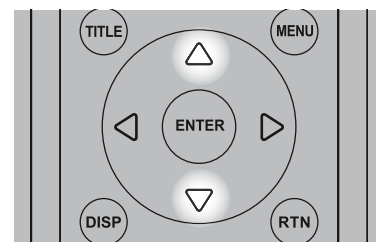
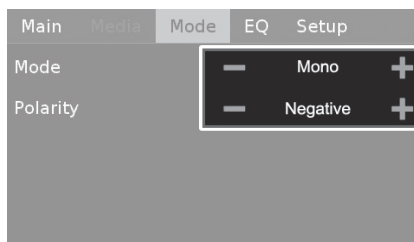
REPEAT. DEVICE SELECTOR must be set to MP.

Return to previous menu or display.

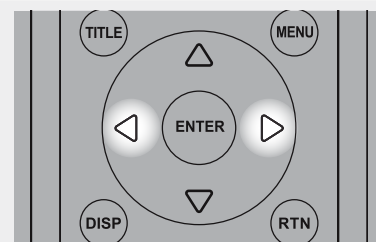
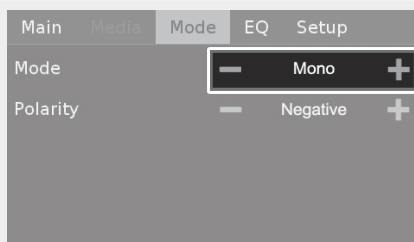


MENU. Any DEVICE SELECTOR setting.

Next, previous - level, function, option, etc.



While at current menu display, use  $\Delta/\nabla$  to highlight option.



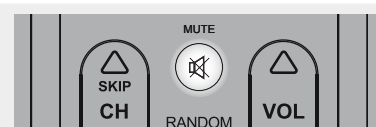
Use  $\triangle/\triangleright$  to select or toggle through applicable options, levels, functions, etc.

Cycle through Power indicator brightness levels.



DIMMER. DEVICE SELECTOR must be set to AMP.

Temporarily mute audio output or restore audio from mute mode.



MUTE. Any DEVICE SELECTOR setting.

## OPERATION

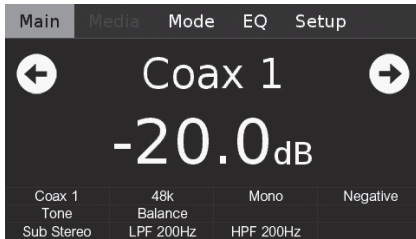
### USING THE M32

#### DISPLAY MENU OPTIONS

The following display options are accessible via the touch panel display - Main, Media, Mode, EQ and Setup.

#### MAIN

Use the Main screen to select a Source. Use the arrows to navigate to the required Source. In the following example the Main screen is displaying the Coax 1 information.



**Coax 1:** Current Source.

**-20.0 dB:** Volume level.

◀ ▶ : Go to previous or next Source.

**48k:** Sample rate.

**Mono:** Listening mode.

**Negative:** Polarity setting.

**Tone:** Tone control settings enabled.

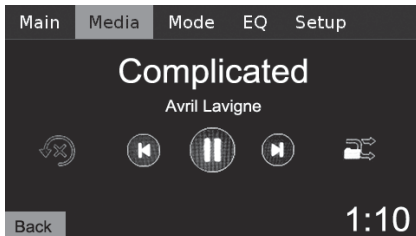
**Balance:** Balance settings enabled.

**Sub Stereo:** Subwoofer mode setting.

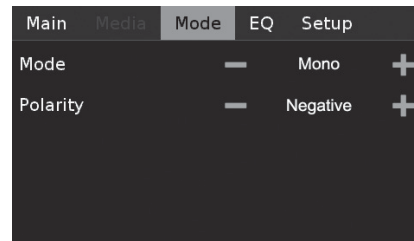
**LPF 200Hz, HPF 200Hz:** Subwoofer frequency setting.

#### MEDIA

During BluOS playback, display switches to Media and show current song title, artist name and album name if available.



#### MODE



The following listening modes, tailored for different types of recording or program material, are provided.

#### STEREO

- Select "Stereo" when you wish to listen to a stereo production, such as music CD or FM broadcast.
- Stereo recordings whether in PCM/digital or analog form and whether surround-encoded or not encoded, are reproduced as recorded.
- Multi-channel digital recordings (Dolby Digital and DTS) are reproduced in "Stereo Downmix" mode via the left and right speakers only.

#### MONO

- Use "Mono" listening mode when the audio source format is mono. The mono information is replicated on both left and right channels.
- "Mono" listening mode is recommended when watching old movies with mono soundtrack, listening to recorded monaural sound sources such as AM radio broadcasts or with the foreign language soundtracks recorded in the left and right channels of some movies.
- Mono is also very helpful when setting up a stereo system to check that both speakers are connected with correct polarity. Correctly connected speakers will have a solid center image and strong bass response. If one speaker has the input connections (+ and -) reversed, the image will be indistinct and the bass will be reduced and uneven sounding.

#### REVERSED

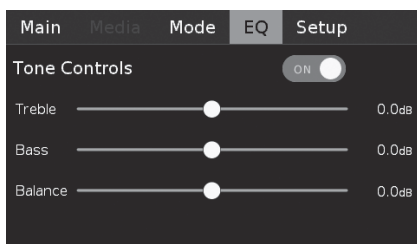
- Sends the right channel to the left speaker and the left channel to the right speaker. This can easily correct a reversed input connection or incorrectly recorded music source.

#### POLARITY

This setting provides compensation for recordings that have reversed polarity.

- Positive: A positive sine wave at the input remains positive at the output. Polarity is defaulted to "Positive" setting.
- Negative: A positive sine wave at the input is negative (inverted) or reversed at the output.

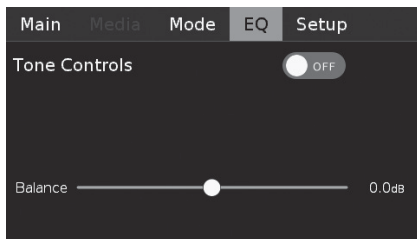
### EQ



The M32 has the following Tone Control levels – Treble, Bass and Balance. Bass and Treble controls only affect the low bass and high treble leaving the critical midrange frequencies free of coloration. The Balance control adjusts the relative levels of the left and right speakers.

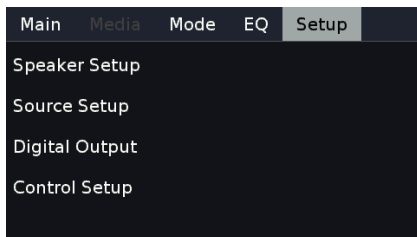
● : Slide to adjust treble, bass or balance level.

ON OFF : Slide to turn ON or OFF Tone Controls. At OFF setting, tone controls (Treble and Bass) are disabled or defeated – Balance option remains available.

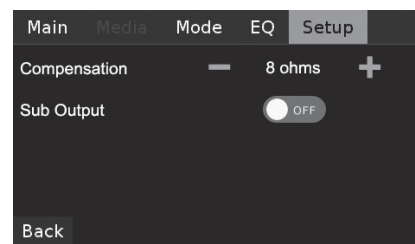


### SETUP

The Setup menu contains the menu options for Speaker Setup, Source Setup, Digital Output and Control Setup.



### SPEAKER SETUP



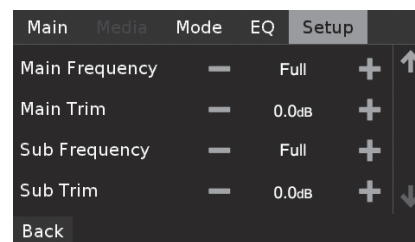
#### SPEAKER COMPENSATION

The digital impedance compensation filter provides fine tuning of the top octave to match your speaker impedance. This results in perfectly flat frequency response at 20 kHz. The effect of this filter may not be audible\* but it is measurable and it compensates for the small effect of the digital reconstruction filter that eliminates the 844 kHz sampling frequency of the amplifier.

\* *The exception may be some electrostatic speakers that have very low impedance at high frequency. The lower the HF impedance, the greater the deviation from flat response.*

#### SUB OUTPUT

At "ON" Setting, all subwoofer settings are in effect. At "OFF" setting, all subwoofer settings are disabled. With Sub Output set to "ON", the following subwoofer settings can be setup.



#### IMPORTANT

Set the "Sub Output" option under "Speaker Setup" settings to "ON" for the OUTPUT terminals to function as Subwoofer out. On the other hand, the OUTPUT terminals will function as PRE-OUT if the "Sub Output" option is set to "OFF".

# OPERATION

## USING THE M32

### SUB MODE

- Set the subwoofer mode to either mono or stereo setting.
  - Mono:** Select this setting when using one subwoofer. At mono mode, the left and right channels are summed in the low pass subwoofer output to drive a single subwoofer.
  - Stereo:** Select this setting when using two subwoofers, one for the left channel and one for the right channel.

### MAIN FREQUENCY (40Hz to 200Hz and Full)

#### MAIN TRIM (-12.0dB to 0.0dB)

- Crossover allows easy bi-amplification or subwoofer integration by adding the required filters to redirect bass frequencies to the subwoofer.
- Frequencies from 40Hz to 200Hz and Full can be selected, with the high pass signal sent to the amplifier section and the low pass signal sent to Subwoofer Out.

### SUB FREQUENCY (40Hz to 200Hz and Full)

#### SUB TRIM (-12.0dB to 0.0dB)

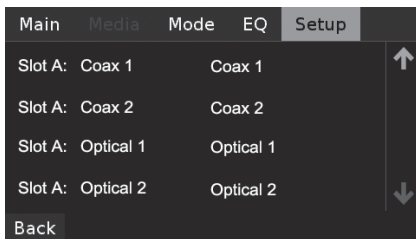
- Selected subwoofer crossover frequency and below will be redirected to subwoofer output.
- Sub trim provides exact volume matching of the subwoofer level to the main speaker level.

### NOTE

*Since the low pass filter is already implemented in the M32, the subwoofer should be set to the highest frequency crossover setting available or bypassed if it also includes a crossover function.*

### SOURCE SETUP

Source Setup makes it possible to select a Source and enable or disable it as desired. The optional DD AP-1 (Direct Digital Analog Phono), DD HDM-1 (HDMI) and MDC BluOS modules must be installed to select Sources like Single-ended, Balanced, Digital HDMI 1 or BluOS. If the applicable module is not installed, the corresponding sources will not be available from the Source Setup menu selection.

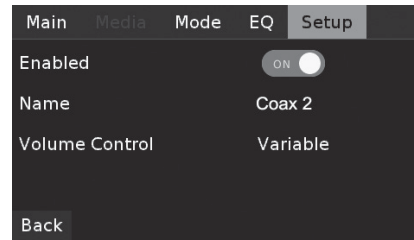


--- : Non-MDC or built-in sources.

**Slot A :** Location slot of the Source module (MDC) in the rear panel.

**Cable TV :** Source name for Line 1 input. Source name can be changed in the "Name" section shown below.

When a Slot line item is selected, the following menu options will be displayed.



**Enabled:** Source input can be enabled (ON) or disabled (OFF).

**Name:** Source input name. Selecting this line item will lead to the menu keyboard where one can type the preferred name for the current source.



### VOLUME CONTROL

The M32 VOLUME control function is dependent upon the "Volume Control" menu setting. Volume control can either be set to "Fixed" or "Variable". Select "Save" to store selected "Volume Control" and "Fixed Level" or "Variable" settings.

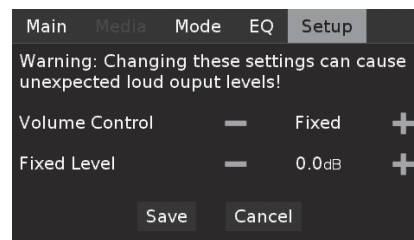
#### Fixed

If "Volume Control" is set to "Fixed", audio output level is fixed and the M32's volume control is bypassed. With "Fixed" volume control setting, the M32 becomes like a basic amplifier with volume controlled by an external device.

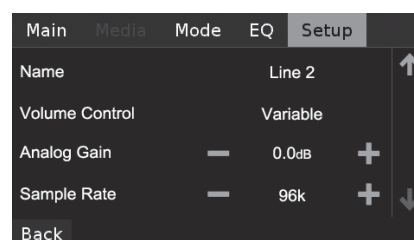
- Set "Fixed Level" to desired preset dB level. Audio output is fixed to the selected level after saving the setting. Audio output level will not change when using the Volume control or HTRM 2's [VOL Δ/∇].
- At "Fixed Level" setting, the volume control or HTRM 2's [VOL Δ/∇] will have no effect and effectively disabled.

#### Variable

- When set to "Variable", audio output level is directly adjustable using the volume control or HTRM 2's [VOL Δ/∇].



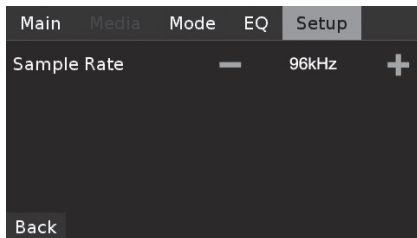
The following additional menu options are included if LINE 1 or LINE 2 input is selected.



**Analog Gain:** Gain adjustment allows all sources to play back at the same volume level so you don't need to adjust the volume every time a new source is selected. It is generally preferable to reduce the level of the loudest source rather than making louder the softer sources.

**Sample Rate (48 kHz, 96 kHz, 192 kHz):** Select the user's preference for sample rate of the Analog-to-Digital Converter. Higher sampling rates allow for anti-aliasing filters to take effect further outside the audible frequency range and are generally considered to sound better, especially in the high frequencies. This option is applicable only for LINE 1 or LINE 2.

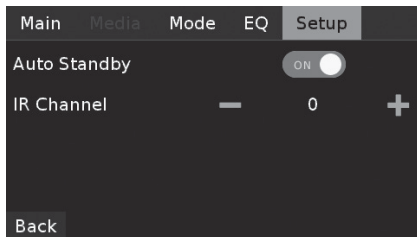
### DIGITAL OUTPUT



#### SAMPLE RATE (48 kHz, 96 kHz, 192 kHz)

Audio inputs may come from various sources with different sampling rates. Select 48 kHz, 96 kHz or 192 kHz to convert all digital audio output content to single sampling rate.

### CONTROL SETUP



#### AUTO STANDBY

Allows the option of the M32 going to standby mode after 15 minutes of inactivity or remain at operating mode regardless of any source activities.

**ON:** M32 will automatically go to standby mode if there are no user interface interaction and no active source within 15 minutes.

**OFF:** M32 remains at operating mode even if there is no user interface interaction and no active source within 15 minutes. This is the default setting.

#### IR CHANNEL

The M32 has the capability to operate via Alternate IR channel. This is useful if you have two NAD products that can be operated by similar remote control commands. With alternate IR Channel, two different NAD products can be controlled independently in the same zone by setting each one to a different IR channel.

#### IR Channel Assignment

The M32 and the HTRM 2 remote control must be set to the same channel.

#### To change the IR Channel on the HTRM 2 remote control

- Include a channel number before the library code. For HTRM 2, library code "100" is the default library table for "AMP" device. To select this "AMP" library table for "IR Channel 0", retain the library code "100".
- If you want to load the "AMP" library table on "IR Channel 1", prefix the library code with "1" to indicate association with "IR Channel 1". Load then the "AMP" library table using the code "1100".

#### Sample setup of two NAD products on the same Zone

M32 and T 787 are both defaulted to IR Channel 0. If [OFF] button is pressed on the HTRM 2 remote control (or HTR 8 remote control for the T 787), both products will go to standby mode. Press [ON] and both products will power up from standby mode.

To prevent both products from simultaneously going in and out of standby mode along with other common commands, set each one to a different IR channel. In this setup, we will keep T 787 and HTR 8 remote control defaulted to "IR Channel 0". As for M32, we will assign it to "IR Channel 1"; the same applies to HTRM 2.

Set M32 and HTRM 2 to "IR Channel 1" via the following procedure.

#### M32

- Select "1" as the IR Channel setting of the M32.

#### HTRM 2

Ensure the M32 is powered-up ("on", not merely in standby).

- 1 Press and hold together the [AMP] and [A/V PSET] buttons until the Learn LED (located between HTRM 2's ON and OFF buttons) turns steady green. Release both buttons.
- 2 While keeping the HTRM 2 pointed towards M32, press "1", "1", "0" and "0" using HTRM 2's numeric buttons.
- 3 Press [OFF]. If the M32 goes to standby mode, this indicates that the library input is successful.
- 4 Press [ENTER] to accept the library code input and exit the Library mode.

With both M32 and HTRM 2 set to "IR Channel 1", the M32 can now be remotely controlled independent of the T 787.

#### NOTE

*Performing a Factory Reset for HTRM 2 will result to a return to the factory default "IR Channel 0" setting.*

### LISTENING TO COMPUTER

Use Type A to Type B cable connector to directly stream 24/192 PCM content from your PC or MAC to the M32. Ensure that the Sound or Audio device setting of your computer is set to "NAD USB Audio".

#### MINIMUM PC SYSTEM REQUIREMENT

Microsoft Windows XP Service Pack 2 or higher, Microsoft Windows 7

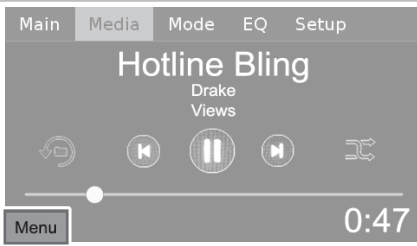
#### FOR MAC USERS

Minimum Mac OS X Snow Leopard (version 10.6) and later versions

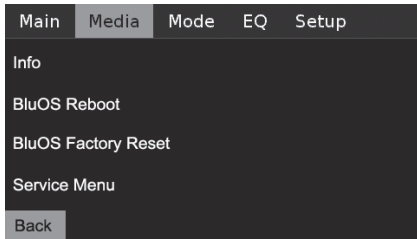
# OPERATION

## OTHER FEATURES

### BluOS MENU



BluOS "Menu" becomes available if the optional MDC BluOS is installed. BluOS "Menu" can be accessed directly from the touch panel display. Select "Menu" during BluOS playback as above. The following are the BluOS menu options – Info, BluOS Reboot, BluOS Factory Reset and Service Menu.



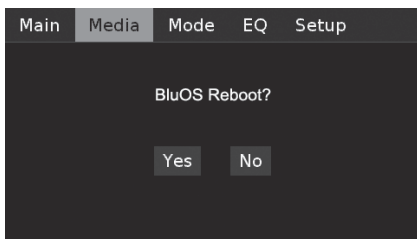
### INFO

Display information about the installed MDC BluOS module like the sample shown below.



### BluOS REBOOT

Select "Yes" to restart the MDC BluOS.



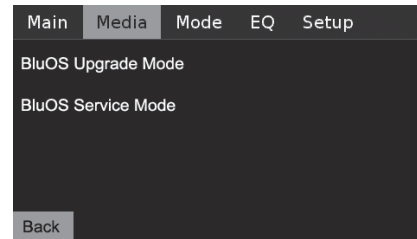
### BluOS FACTORY RESET

Initiate the restoring of the MDC BluOS to its factory default settings. Select "Yes" to initiate factory reset or "No" to maintain current settings.



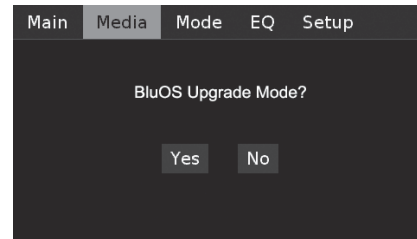
### SERVICE MENU

Service Menu has two options - "BluOS Upgrade Mode" or "BluOS Service Mode".



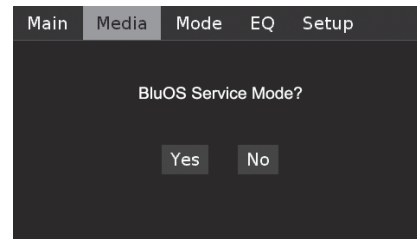
### BluOS UPGRADE MODE

Select "Yes" to initiate BluOS upgrade mode. Ensure that the MDC BluOS is connected wired or wirelessly. Follow the display screen prompt to complete the upgrade procedure.



### BluOS SERVICE MODE

Use for servicing purposes only. This is a feature normally associated and coordinated with authorized service personnel.





The NAD HTRM 2 is ready to operate the M32 right out of the box, but it is really eight remotes in one. Each of the 8 Device Selector keys at the top of the handset can call up a new “page” of remote control codes to be transmitted by the remaining keys. You may “teach” codes from any infrared-remote controlled component, regardless of brand, to any or all of these.

Obviously, the most logical system is that you teach the codes from your BD player to the [BD] Device Selector “page,” your television’s codes to the [TV] “page,” and so on, but there is no required scheme: You may load any commands to any key on any page (see “Learning Codes From Other Remotes,” below).

The HTRM 2 is already preprogrammed with a full complement of commands for the M32 on its [AMP] Device Selector page, and as well as with library commands to operate most NAD-brand CD, BD or DAC components on the corresponding Device Selector “pages.” These default commands are permanent: Even if you teach the HTRM 2 new commands to take their place, the underlying library commands remain in place and can easily be recalled should you add an NAD component to your system later (see “Delete Mode,” below).

Note: For use with the M32, it should not be necessary to re-program any keys on the HTRM 2 [AMP] page. However, in order for the HTRM 2 to control your specific NAD-brand components you may need to load one or more different code-libraries (see “Loading Code Libraries,” below).

### CONTROLLING THE M32

The HTRM 2 is divided into two main sections. Eight Device Selector keys at the top—[AMP], [MP], [TV], and so on—set the handset’s remaining keys to a “page” of commands to control a particular component. A Device Select key determines only what component the HTRM 2 will command; it does not perform any function on the M32. All of the remaining keys are function keys that can “learn” control codes from virtually any infrared remote controller, allowing you to teach the codes of your equipment, regardless of brand, to the HTRM 2.

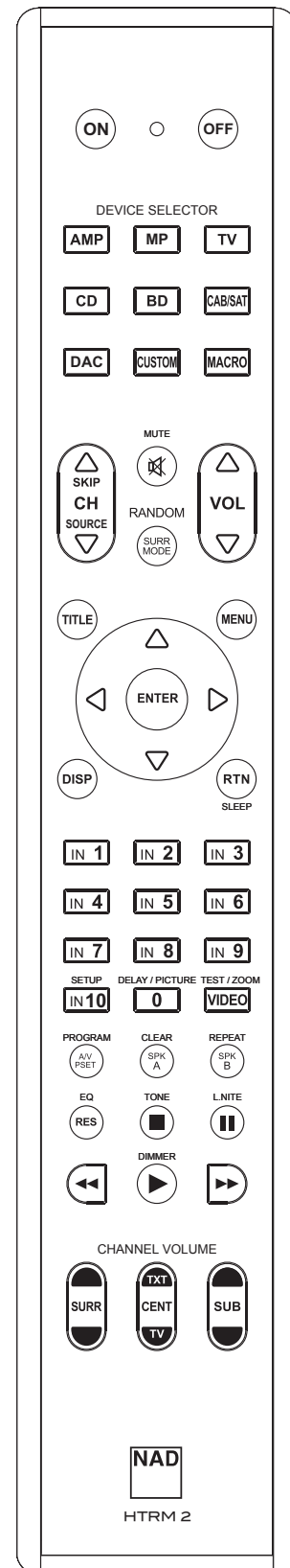
However, the HTRM 2 is already preprogrammed to operate the M32. All of the function keys on the [AMP] Device Selector “page” perform M32 functions. (The HTRM 2 can also command many other NAD components, from its [CD], [BD], [DAC] and [CUSTOM] pages.)

It is important to note that certain HTRM 2 keys perform different functions depending on the selected Device Selector “page.”

### LEARNING CODES FROM OTHER REMOTES

Begin by positioning the HTRM 2 “nose-to-nose” with the source remote so the two devices’ infrared windows are about 2 inches apart.

- 1 Enter Learning Mode: On the HTRM 2, simultaneously press-and-hold for 3 seconds both a Device Selector key and the [RES] key until the Learn LED (located between HTRM 2’s ON and OFF buttons) turns steady green.
- 2 Press the HTRM 2’s function key you wish to teach a command; the Learn LED will turn amber.
- 3 Press-and-hold the function key on the source remote: The HTRM 2’s Learn LED will flicker amber for a second or two, then turn solid green. The command is learned.
- 4 Press the HTRM 2’s Device Selector key again to exit the learning mode.



## OPERATION

### USING THE HTRM 2 REMOTE CONTROL

If the Learn LED does not flicker amber you may need to vary the distance between the remotes. If the Learn LED turns red instead of green, the source remote command could not be learned on that attempt.

#### Example: Learning "BD Pause"

Position the HTRM 2 and your BD player's remote as described above.

- 1 On the HTRM 2, simultaneously press-and-hold [BD] and [RES]; the Learn LED turns steady green.
- 2 Press the HTRM 2's Pause [II] key; the Learn LED turns amber.
- 3 Press-and-hold the corresponding Pause key of your BD player's remote control; the HTRM 2's Learn LED flickers amber and then turns solid green. The command is learned.
- 4 Press [BD] again to exit the learning mode.

#### NOTES

- The DEVICE SELECTOR keys can themselves be configured to learn commands.
- Press and hold a configured DEVICE SELECTOR for at least 2 seconds to execute a function assigned to the particular DEVICE SELECTOR key.
- A short press of a configured DEVICE SELECTOR will just switch the active device.

#### CANCEL OPERATION

You can cancel configuring a key, by pressing the active Device Selector key before the learn process is complete; the Learn LED will turn red.

#### PUNCH THROUGH

The HTRM 2's "punch-through" function allows you to retain a function key from one Device Select "page" to another, so that, for example, the AMP [SURR MODE] function might still control the M32 when the BD Device Selector page is active.

#### NOTE

*The HTRM 2's [VOL Δ/▽] keys are pre-programmed as "punched-through" for all Device Selector pages: [VOL Δ/▽] will operate the M32's master-volume regardless of the currently selected device. The [SURR] [CENT] and [SUB] Channel Volume controls similarly are pre-programmed as punched-through.*

#### SET A PUNCH THROUGH

- 1 Enter Learning Mode and press the desired button to be punched through.
- 2 Press twice the Device Selector button of the destination device. The status LED will turn green.
- 3 Press the Device Selector button again to exit Learning Mode.

#### Example: Punch-through AMP [SURR MODE] key to the BD "page"

- 1 On the HTRM 2, simultaneously press-and-hold [BD] and [RES]; the Learn LED turns steady green.
- 2 Press [SURR MODE]; the Learn LED turns amber.
- 3 Press [AMP] twice; the Learn LED turns green.
- 4 Press [BD] again to exit the learning mode.

#### COPY A COMMAND FROM ANOTHER KEY

You may copy a command from any HTRM 2 key to any other key.

#### COPY A KEY FUNCTION

- 1 Enter Learning Mode.
- 2 Press the key that will contain the copied key. The Learn LED turns steady amber.
- 3 If the key to be copied resides on another "page," press first the corresponding Device Selector key and then press the desired key to be copied. The Learn LED turns steady green.
- 4 Press the Device Selector key again to exit Learning Mode.

#### Example: Copy the Pause command from the CD page to the AMP [II] button:

- 1 On the HTRM 2, simultaneously press-and-hold [AMP] and [RES]; the Learn LED turns steady green.
- 2 Press Pause [II]; the Learn LED turns amber.
- 3 Press [CD]; press Pause [II]; the Learn LED turns green.
- 4 Press [AMP] again to exit the learning mode.

#### NOTE

*The copy and punch-through functions are similar. However, if you copy a command and then subsequently delete, or over-write the original (source-key) command, the copied-to key's command remains unchanged. If you punch-through to a command and then delete or over-write the original key, the punched-through functions also change accordingly.*

#### MACRO COMMANDS

A "macro" command is a series of two or more remote codes issued automatically from a single keypress. You might use a macro to automate a simple command sequence, such as, "Turn on the BD player and then press PLAY". Or you might compose an elaborate macro to power up an entire system, select a source, choose a Listening Mode, and begin playback—again, all from a single keypress. Each DEVICE SELECTOR and function keys of the HTRM 2 can be stored one macro.

#### NOTE

*Macros are independent of the currently selected device.*

#### RECORDING MACROS

- 1 Simultaneously press-and-hold the [MACRO] key and the HTRM 2 function key to be assigned the macro until the status LED turns green. The macro button will also light up.
- 2 Press the sequence of function keys to be recorded into the macro.
- 3 Be sure to press first the required Device Selector key for each function (you may switch devices while recording the macro as many times as necessary), allowing you to create macro containing commands from more than one Device Selector "page."
- 4 After entering the desired command sequence, press [MACRO] again to store the macro; the Learn LED and [MACRO] key illumination will turn off.

**Example:** Record a Macro to the [0] key to Turn on the M32.

- 1 Select "Input 1" (Source 1), and commence playback of connected Source 1 device (as in BD player).
- 2 On the HTRM 2, simultaneously press-and-hold [MACRO] and [0] (numeric zero); the Learn LED turns steady green.
- 3 Press [AMP]; press [ON]; press [1] ("Input or Source 1"); press [BD]; press [▶] (Play) - the Learn LED blinks as each step is added.
- 4 Press [MACRO] again to exit the macro-record mode.

To clear a macro, perform the above steps without entering any functions.

### NOTE

*Each macro can store a maximum of 64 command steps. If you exceed this number, the macro will be stored automatically after the 64th command is added.*

### EXECUTING MACROS

- 1 Press and release [MACRO]; its key lights for 5 seconds. While it remains lit, press an HTRM 2 key where a macro has been stored.
- 2 The corresponding macro will run; as each step executes, its "parent" Device Selector's key flashes briefly.
- 3 When finished, the [MACRO] key illumination goes out.

Pressing any other HTRM 2 key while a macro is executing will abort the macro. Remember that you must hold the HTRM 2 so that its infrared emitter can activate the target components.

### NOTE

*When a macro executes, a 1 second delay is automatically inserted between its commands. If you need more than a 1 second delay between particular commands—for example, to permit a component to power up completely—you can record "empty" steps into the macro by changing Device Selector "pages" without entering actual command functions.*

### KEY ILLUMINATION TIMEOUT

The HTRM 2's key-illumination can be set to remain lit for 0-9 seconds. The default value is 2 seconds.

### SET THE ILLUMINATION TIMEOUT

- 1 Simultaneously press and hold the HTRM 2's [DISP] and the [0-9] key corresponding to the desired timeout duration.
- 2 The Learn LED will flash twice to confirm the new setting.
- 3 When set to zero, the illumination will not turn on at all.

### NOTES

- Key illumination is activated when one presses any HTRM 2 key.
- If HTRM 2 senses movement, key illumination is activated without having to press a key. If HTRM 2 is shaken, key illumination is also activated.
- Key illumination is the biggest drain on the HTRM 2's batteries. A short key illumination timeout will extend battery life appreciably; turning it off altogether (set it to 0 seconds) will lengthen it still further.

### CONFIGURING KEY ILLUMINATION

Keys to Press (for 3 seconds)	Mode
DISP + Digit Key (0-9)	Set key illumination timeout to number of seconds corresponding to digit key. Zero turns off the key illumination entirely.
DISP + OFF	Disable light sensor. Key illumination will turn on with any key press.
DISP + ON	Enable light sensor.
DISP + ENTER	Set the light sensor threshold to the current light level.
DISP + RTN	Restore all key illumination settings to the defaults.

### FACTORY RESET

The HTRM 2 can be reset to its factory state, deleting all learned commands, copied and punched-through keys, macros, and other setup information, reverting all keys to their pre-programmed library commands.

### PERFORM A FACTORY RESET

- 1 Simultaneously press-and-hold the HTRM 2's [ON] and [RTN] keys for 10 seconds. The Learn LED will start to flash green.
- 2 Release [ON] and [RTN] before the second flash is complete; the Learn LED will turn red, indicating the remote has been reset.

### NOTE

*Release [ON] and [RTN] before the second flash goes out; otherwise, the unit will not reset. Should this occur, repeat the full procedure.*

### DELETE MODE

The HTRM 2 can store learned, copied, and "default library" commands on any single key. The default library commands are the pre-programmed NAD codes, such as the native M32 commands on the [AMP] page.

You can delete commands by layers back "down" to the default library command on any key, removing learned commands, punched-through functions, and copied keys.

### NOTE

*The default library commands cannot be deleted.*

### ENTER DELETE MODE

- 1 Simultaneously press-and-hold the desired key's Device Selector key and the [RTN] key for 3 seconds, until the Learn LED turns green.
- 2 Press the function key whose command you wish to delete; the Learn LED flashes; the number of times indicates which type of function has become active - see the table below.
- 3 Press the active Device Selector key again to exit Delete Mode.

### NOTE

*You can delete multiple function-key commands on the same Device Selector "page". To delete more than one Device Selector page, exit Delete mode and then re-enter the required page.*

Flashes	Command Type
1	Default Library Command
2	Copied Library Command
3	Learned Command

## OPERATION

### USING THE HTRM 2 REMOTE CONTROL

#### LOADING CODE-LIBRARIES

The HTRM 2 can store a different library of default NAD codes for each of its Device Selector "pages." If the original default library does not control your NAD CD player, BD player, or other component, follow the procedure below to change the code-library.

- 1 Begin by ensuring that the component you wish the HTRM 2 to control is plugged in and powered-up ("on," not merely in standby).
- 2 To enter the HTRM 2s Library Mode, simultaneously press-and-hold both the desired Device Selector key and the [A/V PSET] key for 3 seconds, until the Learn LED turns green.
- 3 While keeping the HTRM 2 pointed toward the component, enter the first appropriate three-digit code-library number from the table below.
- 4 Press [OFF]. If the component turns off, press [ENTER] to accept that code-library number and exit the Library Mode.
- 5 If the component does not turn off, enter the next three-digit code-library number from the table.
- 6 When you enter the correct number the component will turn off; press [ENTER] to accept that code library number and exit the Library Mode.

LIBRARY CODE	NAD PRODUCT DESCRIPTION	LIBRARY CODE	NAD PRODUCT DESCRIPTION
100	Receiver/Processor (Discrete ON/OFF)	300	Tuner
101	Receiver/Processor (Toggle ON/OFF)	301	L75, L76 Tuner
102	S170	302	L70 Tuner
103	L75	303	L53 Tuner
104	Second Zone Commands (Zone 2)	304	L73 Tuner
3112	Zone 3	305	C425
4112	Zone 4	306	C445
105	L70	307	Txx5 Series Tuner
106	L76	400	Tape Deck B
107	118	401	TAPE Deck A
108	L53	500	TV 280
109	L73	501	MR13
110	Stereo Receiver / Amplifier	502	MR20
111	Stereo Second Zone	503	PMR45
112	Txx5 Series	600	T535, T562, T585, M55
200	CD Player	601	T550, L55
201	CD Player (old)	602	T512, T531, T532, T571, T572
202	5170, 5240, 5340	603	L70, L73 BD
203	5325	604	L56
204	5060	605	T513, T514, T515, T517, T524, T533, T534
205	M5	606	L53 BD

#### SEARCH MODE

If none of the codes from the table work, turn on the component and try the "search" method as follows:

- 1 Enter Library Mode by simultaneously pressing-and-holding for 3 seconds the desired Device Selector key and the [A/V PSET] key, until the Learn LED turns green.
- 2 Press-and-hold the HTRM 2's [Δ] or [▽] key. The remote will step through all the available codes at a rate of approximately 1 per second.
- 3 When the component turns off, release the cursor key.
- 4 Press [ENTER] to accept that code library and exit Library Mode.
- 5 Try a few commands. Should you prove to have stepped past the needed code-library, re-enter the Library Mode and use the cursor key to step back to it.

#### NOTE

*It is possible that search mode will find code-libraries that operate, at least partially, some other brand (non-NAD) components. However, we can only ensure the completeness or accuracy of NAD code-libraries. We do not support the HTRM 2's operation with other-brand components.*

#### CHECKING CODE LIBRARY NUMBER

- 1 Enter Library Mode by simultaneously pressing-and-holding for 3 seconds the desired Device Selector key and the [A/V PSET] key, until the Learn LED turns green.
- 2 Press the [DISP] key.
- 3 The HTRM 2 indicates the current code-library by flashing its [DAC], [CUSTOM], and [MACRO] keys.

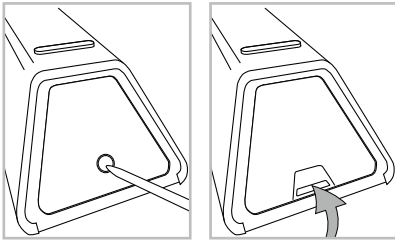
For example, to indicate code-library #501, the HTRM 2 will flash [DAC] 5 times, pause, and then flash [MACRO] once. You might wish to make a note of your components' code-library numbers.

#### SUMMARY OF THE HTRM 2 MODES

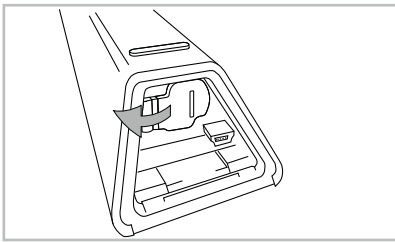
Mode	Keys To Press (for 3 seconds)
Learn/Copy/Punch Through	Device Key + RES Key
Delete Mode	Device Key + RTN Key
Macro Record	Macro Key + Function Key
Library Mode	Device Key + [A/V PSET] Key
Back Light Timeout	DISP Key + Digit Key
Factory Reset	See "Factory Reset" above

### BATTERY INSTALLATION

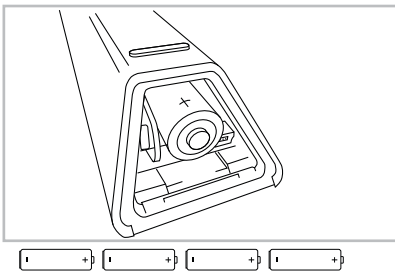
- 1 Use the flat or rounded end of a pointed tool to push open the pin of the battery cover.



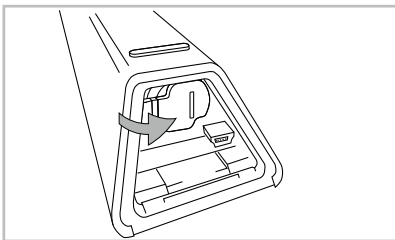
- 2 Open the battery hatch.



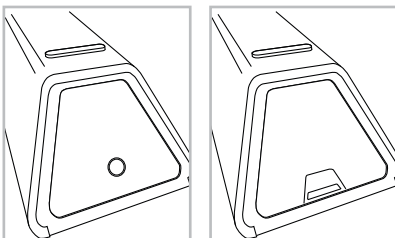
- 3 Insert the supplied four AA batteries.



- 4 Push the battery hatch until it clicks close.



- 5 Restore the battery cover.



# REFERENCE

## SPECIFICATIONS

All specs are measured according to IHF 202 CEA 490-AR-2008 standard. THD is measured using AP AUX 0025 passive filter and AES 17 active filter.

### PREAMPLIFIER SECTION

#### LINE INPUT, PRE OUT

THD (20 Hz – 20 kHz)	<0.013 % at 2 V out
Signal-to-Noise Ratio	>97dB (IHF; A-weighted, ref. 500 mV out, unity gain)
Channel separation	>105 dB (1 kHz)
	>85 dB (10 kHz)
Input impedance (R and C)	10 kohms + 100 pF
Maximum input signal	>4 Vrms (ref. 0.1 % THD)
Output impedance	240 ohms
Input sensitivity	146 mV (ref. 500 mV out, Volume maximum)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Maximum voltage output -IHF load	>2 V (ref. 0.1 % THD)
Tone controls	Treble: ±10 dB at 20 kHz
	Bass: ±10 dB at 60 Hz
	Balance: -10 dB

#### PHONO INPUT, PRE OUT

THD (20 Hz – 20 kHz)	<0.03 % at 2 V out
Signal-to-Noise Ratio	>80dB (200 ohms source; A-weighted, ref. 500 mV out)
	>76dB (MM cartridge source, IHF; A-weighted, ref. 500 mV out)
Input sensitivity	2.38 mV (ref. 500 mV out, Volume maximum)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Maximum input signal at 1kHz	>66 mV rms (ref. 0.1 % THD)

#### LINE INPUT, HEADPHONE OUT

THD (20 Hz – 20 kHz)	<0.005 % at 1V out
Signal-to-Noise Ratio	>110 dB (32 ohms loads; A-weighted, ref. 2V out, unity gain)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Channel separation	>60 dB at 1kHz
Output impedance	0.5 ohm
Output power	110 mW at 32 ohms

### GENERAL SPECIFICATIONS

#### LINE IN, SPEAKER OUT

Continuous output power into 8 ohms and 4 ohms	180 W (ref. 20 Hz-20 kHz at rated THD, both channels driven)
THD (20 Hz – 20 kHz)	<0.03 % (250 mW to 180 W, 8 ohms and 4 ohms)
Signal-to-Noise Ratio	>91 dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms)
Clipping power	>195 W (at 1 kHz 0.1 % THD)
IHF dynamic power	8 ohms: 220 W
	4 ohms: 360 W
	2 ohms: 400 W
Peak output current	>30 A (in 1 ohm, 1 ms)
Damping factor	>160 (ref. 8 ohms, 20Hz to 6.5kHz)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Channel separation	>77 dB (1 kHz)
	>70 dB (10 kHz)
Input sensitivity	590 mV (for 180 W in 8 ohms)
Supports bit rate/sample rate	up to 24 bit/192 kHz
Standby power	<0.5 W

#### DIMENSION AND WEIGHT

Gross dimensions (W x H x D) *	435 x 133 x 396 mm
	17 1/8 x 5 1/4 x 15 5/8 inches
Net weight	9.8 kg (21.6 lbs)
Shipping weight	18.5 kg (40.8 lbs)

\* - Gross dimension includes feet, volume knob and extended rear panel terminals.

Specifications are subject to change without notice. For updated documentation and features, please check out [www.NADelectronics.com](http://www.NADelectronics.com) for the latest information about M32.





[www.NADelectronics.com](http://www.NADelectronics.com)

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